

REMARKS/ARGUMENTS

Claims 1-12 are active with some clarity amendments included.

Applicants disagree with the rejections under 35 USC 102(b) based on Ciszewska or 35 USC 103(a) based on Ciszewska and MacDonald because:

(A) the process of Ciszewska and that claimed are different as Ciszewska uses stereoselective reduction compared to resolution with an optically active acid; and

(B) MacDonald actually teaches that attempts to directly resolve with optically active acids were unsuccessful.

The presumption of the rejection under 35 USC 102(b) for claim 1 citing to Ciszewska is one inherency (see page 3 of the Action).

The Examiner has noted that Ciszewska “inherently” possessed. However, the Examiner has provided no proof of this other than stating that “the process has given enough direction on page 654, line 20-22, that using unlabeled system would lead to better yields.”

As noted by the court in *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323 (CCPA 1981), the mere fact that a certain thing may result from a given set of circumstances is not sufficient to prove inherency. Inherency may not be established by probabilities or possibilities. Something that is inherent must inevitably be the result each and every time.

It is by now well settled that the burden of establishing a *prima facie* case of anticipation resides with the Patent and Trademark Office. *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984), quoting *In re Warner*, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967).

As noted by the Board of Patent Appeals and Interferences in *Ex parte Skinner*, 2 USPQ2d 1788, before an Examiner can switch the burden of proof of showing non-inherency

to the applicant, the Examiner must provide some evidence or scientific reasoning to establish the reasonableness of the Examiner's belief that the functional limitation is an inherent characteristic of the prior art. In this case, the Examiner has provided no such evidence.

It is Applicants' position that the process of Ciszewska is different from that claimed and, in particular, Ciszewska does not perform a reduction animation and/or resolution using an optically active acid.

In the Scheme on page 655, compound (14) is aminated with methoxyamine to the resulting imine (15) and is stereoselectively reduced with  $\text{NaBH}_4\text{-ZnCl}_4$  under chiral catalysis with diphenyl valinol. The resulting primary amine (16) is methylated to produce compound (17) which is demethylated to produce (18).

In contrast and in the claimed process, compound VI (identical to substance 14 in Ciszewska) is reductively animated to produce compound V and then demethylated to racemic phenol IV and then further resolved with an optically active acid, such as that defined in claim 2, to give the optically active phenol of III (identical to substance 18 in Ciszewska).

Again, Ciszewska uses stereoselective reduction compared to resolution with an optically active acid.

Furthermore, the claimed process is more effective in providing the resulting compound of formula II because in Ciszewska the resulting rivastigmine (19) has to be further purified with toluyl tartaric acid (2) to achieve the desired optical purity. In contrast, the present process can achieve optical purity better than 99:1 (see page 13, line 1).

Withdrawal of the rejection based on Ciszewska is requested.

Turning to the rejection based on Ciszewska and MacDonald, MacDonald makes it quite clear that attempts to effect direct resolution with optically active acids (i.e., to effect the third step in the claimed process) were unsuccessful (page 2513, second paragraph of MacDonald). (see MPEP §2141.02: "prior art must be considered in its entirety, including disclosures that teach away from the claims").

MacDonald does not provide the requisite teachings that would lead one to consider that the direct resolution of the racemic amine of formula IV to the optically active compound of formula III. In contrast, Applicants submit that a skilled person would take from MacDonald that such direct resolution does not work.

The claimed process advantageously provides optically active products at high optical purity which do not racemize in subsequent treatment. For example, see page 5, 4<sup>th</sup> paragraph:

As is demonstrated in the examples of especially preferred embodiments, the present method makes it possible for obtaining the product of formula I in an especially high optical purity. A reproduction of the method known so far, even with recrystallization, has not resulted in obtaining such high optical purity.

Withdrawal of the rejection is requested.

Finally, a Notice of Allowance is kindly requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)



---

Daniel J. Pereira, Ph.D.  
Registration No. 45,518